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NATIONAL COMMUNICABLE DISEASE CENTER

Morbidity and Mortality

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Vol. 17, No. 18

WEEKLY REPORT

Week Ending May 4, 1968

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

PUBLIC HEALTH SERVICE

BUREAU OF DISEASE PREVENTION AND ENVIRONMENTAL CONTROL

EPIDEMIOLOGIC NOTES AND REPORTS

TULAREMIA – Vermont

Between March 25 and April 20, 1968, an acute febrile illness developed in 32 persons who gave a history of trapping, shooting, or skinning muskrats in Addison and Rutland Counties, Vermont. The febrile illness was usually accompanied by generalized myalgia, headache, epitrochlear and axillary adenopathy, and hand ulcers. Exudate from the hand ulcer of one patient was positive to *Fransiella tularensis* by the direct fluorescent antibody technique. Sera were obtained from 29 of the 32 patients from 2 to 4 weeks after onset of symptoms. Twenty-two patients had agglutination titers against *F. tularensis* of 1:320 or higher; the highest titer was 1:10,240. Of six patients who had two serum specimens drawn at least a week apart, four showed rises in titer. Two other persons who handled muskrats but were not ill had agglutination titers of 1:320 or higher. Seventeen patients received oral tetracycline therapy and improved gradually, while two other patients, within 48 hours after receiving streptomycin, showed a

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TABLE I. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES
(Cumulative totals include revised and delayed reports through previous weeks)

DISEASE	18th WEEK ENDED		MEDIAN	CUMULATIVE, FIRST 18 WEEKS		
	May 4, 1968	May 6, 1967	1963 - 1967	1968	1967	MEDIAN 1963 - 1967
Aseptic meningitis	35	32	27	518	528	493
Brucellosis	3	2	4	49	72	73
Diphtheria	–	3	3	67	38	73
Encephalitis, primary:						
Arthropod-borne & unspecified	12	29	- - -	274	431	- - -
Encephalitis, post-infectious	30	19	- - -	185	282	- - -
Hepatitis, serum	79	45	755	1,343	680	14,899
Hepatitis, infectious	797	769		15,044	14,219	
Malaria	36	33	2	761	694	36
Measles (rubeola)	685	2,389	11,272	12,162	42,160	173,301
Meningococcal infections, total	61	50	75	1,308	1,063	1,193
Civilian	55	44	- - -	1,186	981	- - -
Military	6	6	- - -	122	82	- - -
Mumps	4,895	- - -	- - -	89,627	- - -	- - -
Poliomyelitis, total	1	1	1	15	6	7
Paralytic	1	–	1	15	5	6
Rubella (German measles)	2,506	1,727	- - -	25,725	22,673	- - -
Streptococcal sore throat & scarlet fever	8,390	10,524	8,822	198,720	214,871	194,351
Tetanus	1	2	4	36	54	68
Tularemia	3	5	2	25	49	63
Typhoid fever	7	6	7	85	115	112
Typhus, tick-borne (Rky. Mt. spotted fever)	3	10	1	11	24	9
Rabies in animals	93	102	98	1,363	1,611	1,611

TABLE II. NOTIFIABLE DISEASES OF LOW FREQUENCY

	Cum.		Cum.
Anthrax: R.I.-1	2	Rabies in man:	–
Botulism:	–	Rubella, Congenital Syndrome:	3
Leptospirosis:	9	Trichinosis:	18
Plague:	–	Typhus, murine:	3
Psittacosis:	19		

TULAREMIA – *(Continued from front page)*

prompt response by lysis of fever and resolution of symptoms. There were no fatalities.

All but one of the symptomatic pntients were male, and they ranged in age from 11 yenrs to 69 years with a median nge of 29 years. The average interval from the patients' first contact with muskrats to onset of symptoms wns 6 days nnd the duration of illness was from 1 to 4 weeks. No patient gave n history of insect bites or of handling rabbits.

Prior to this epidemic, no animal or human cases of tularemia had ever been reported from Vermont. These persons who developed tularemia had contact with muskrats from three streams (Otter Creek, Little Otter Creek, and Lewis Creek) and their tributaries that flow into Lake Champlain. Although an increase in the number of dead muskrats was noted this spring by hunters and game officials, these people also noted an increase in the number of live muskrats.

The association of this disease with muskrats, an aquatic mammal, and the occurrence of human cases at the end of winter when arthropod-borne transmission is unlikely, suggests that water-borne transmission was the manner by which the muskrats were infected. This pattern of tularemia transmission is well established in many of the Rocky Mountnin states.[1] Contaminntion of water with *F. tulorensis* presumptively occurs via decomposition of dead diseased wildlife, such as rabbits or field mice.

Bacteriologic studies are now underway on specimens of water, mud, muskrats, rabbits, foxes, turtles, and insect life obtained from the area.

(Reported by Dr. Donald S. Bicknell, Vergennes, Vermont; Dr. Linus J. Leovens, Director, Bureau of Communicable Diseose Control, and Dr. Dymitry Pomor, Director, Bureau of Laborotories, Vermont Deportment of Heolth; the Bacterial Chemistry Unit, Loborotory Progrom, NCDC; ond o team from NCDC.)

REFERENCE

[1]Parker, R. R., *et al:* National Institutes of Health Bulletin: No. 193, 1951.

SALMONELLA CONTAMINATION OF ENZYMATIC DRAIN CLEANERS

Enzymatic drain cleaners are products containing dried enzyme preparations, desiccated bacterial cultures, and dry fillers or cnrriers. These products are used to decongest and to clean drains, septic tanks, grease pits, waste ponds, dishwashers, potato peelers, wash sinks, and other kitchen and bathroom equipment. They are recommended for use in schools, hospitals, sanitariums, hotels, creameries, and food processing plants, and are claimed to be nonpathogenic.

In the autumn of 1967, the Chicago Board of Health reported the isolation of salmonellae from an enzymatic drain cleaner; this finding was confirmed by the Epidemiological Services Laboratory Section, NCDC. In early 1968, the Connecticut State Department of Health notified the Salmonellosis Unit, NCDC, that it had isolated six salmonella serotypes from another brand of enzymatic drain cleaner. To determine the extent and source of salmonella contamination of these products, the Consumer and Marketing Service, U.S. Department of Agriculture and the Epidemiological Services Laboratory, NCDC, performed bacteriologic examinations on samples of drain cleaners.

The USDA survey included 68 samples of enzymatic cleaners from 28 firms. Of the 68 samples, 26 (38 percent) contained salmonellae. The 26 positive samples represented nine different firms; 19 firms had products that did not yield salmonellae. Salmonella O groups from positive samples included B, C, C_1, C_2, E_1, E_2, E_4, and G. Some of the enzymatic cleaners included in the survey were from reserve samples that had been stored at the USDA laboratory for as long as 2 years. Positive samples obtained from these stored products indicate the viability of salmonella in these compounds when stored at ambient temperatures.

The Epidemiological Services Laboratory examined both the finished product and constituent ingredients of the drain cleaner previously found to contain salmonella by the Connecticut State Department of Health. Twelve samples of the products and samples of 11 different constituents were provided by the U.S. Food and Drug Administration. All 12 of the product samples examined were found to contain salmonellae, yielding a total of seven serotypes. Only two of the constituent ingredients, cellulase and lipase, were found to contain salmonellae. Both enzyme preparations had been manufactured by the same firm. The serotypes found in the drain cleaner were *Salmonello californio, S. infantis, S. lexington, S. meleagridis, S. montevideo, S. oronienburg,* and *S. senftenberg*. The cellulase was positive for *S. californio, S. montevideo,* and *S. senftenberg,* and the lipase for *S. californio, S. lexington,* and *S. montevideo*. Constituent ingredients found negative for snlmonellae included bacterial mix, anhydrous disodium phosphate, anhydrous monosodium phosphate, propylene oxide, propylene glycol, sodium thiosulphate, protease, amylase, urea, and nitrilio sodium acetate.

Although these studies show salmonella contamination of enzymatic drain clenners, to date, no cases of salmonellosis attributable to enzymatic drain clenners have been documented.

(Reported by Somuel L. Andelman, M.D., Commissioner of Health, Olga Brolnitsky, M.D., Chief Epidemiologist, Herbert L. Slutsky, Ph.D., Epidemiologist, ond Hyman Orbach, Ph.D., Epidemiologist, Chicogo Board of Health; Barbara Christine, M.D., and James Hort, M.D., Connecticut Stote Department of Health; The U.S. Deportment of Agriculture; the U.S. Food ond Drug Administrotion; and

the Epidemiological Services Laboratory Section, and Salmonellosis Unit, Epidemiology Program, NCDC.)

Editorial Note

As a result of the USDA survey, a policy concerning use of enzymatic cleaners in federally inspected meat and poultry establishments was adopted by the Technical Services Division, Consumer and Marketing Service, USDA. A copy of this policy may be obtained on request from: Laboratory Branch, Technical Services Division, Consumer and Marketing Service, USDA, P. O. Box 348, Beltsville, Maryland 20705.

CURRENT TRENDS

MEASLES – United States, Puerto Rico, and the Virgin Islands

From March 24 through April 20, 1968 (weeks 13-16), 392 counties or health districts reported one or more cases of measles. This is a decrease of 339 counties from the 731 counties or health districts reporting measles during the corresponding 4-week period in 1967. Based on reporting, this indicates an increase in the number of "measles free" areas. Of these 392 counties, 70 (18 percent) reported a total of 10 or more cases (Figure 1), whereas 240 of 731 counties (33 percent) reported a similar number of cases during the comparable 4-week period in 1967 (Figure 2).

Figure 1
COUNTIES OR HEALTH DISTRICTS REPORTING A TOTAL OF 10 OR MORE CASES OF MEASLES
UNITED STATES, PUERTO RICO, AND THE VIRGIN ISLANDS
MARCH 24-APRIL 20, 1968

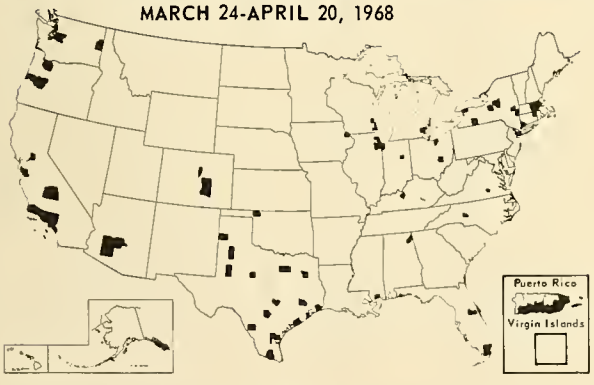
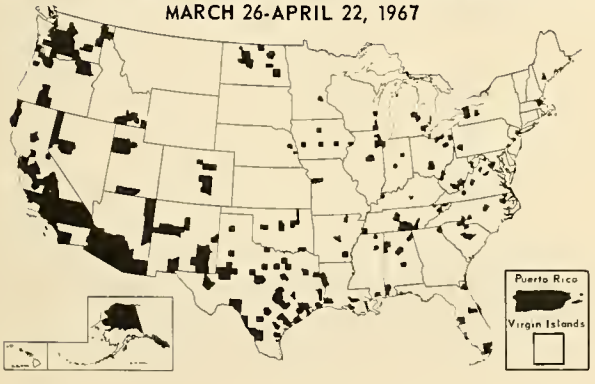


Figure 2
COUNTIES OR HEALTH DISTRICTS REPORTING A TOTAL OF 10 OR MORE CASES OF MEASLES
UNITED STATES, PUERTO RICO, AND THE VIRGIN ISLANDS
MARCH 26-APRIL 22, 1967



In five of the nine geographic divisions the number of counties or health districts, reporting measles during this 4-week period this year, was less than one-half the number reporting cases in the comparable 4-week period in 1967 (Table 1). The Middle Atlantic division was the only division that did not show any decrease in the number of counties or health districts reporting cases. However, one state (Pennsylvania) in that division showed a decrease from 19 counties in 1967 to 13 in 1968.

Table 1
Number of Counties or Health Districts Reporting Measles During Weeks 13-16, 1968 and 1967 by Geographic Divisions

Geographic Division	Number of Counties or Health Districts Reporting			
	1 or more cases		Total of 10 or more cases	
	1968 Mar. 24-Apr. 20	1967 Mar. 26-Apr. 22	1968 Mar. 24-Apr. 20	1967 Mar. 26-Apr. 22
United States	392	731	70	240
New England	19	26	4	3
Middle Atlantic	53	51	12	11
East North Central	72	105	10	19
West North Central	24	56	1	16
South Atlantic	46	107	4	33
East South Central	25	76	3	25
West South Central	68	141	20	60
Mountain	29	79	4	31
Pacific	56	90	12	42
Puerto Rico (health districts)	5	5	2	5
Virgin Islands	1	1	–	–

The measles data from Puerto Rico and the Virgin Islands have been included on the maps (Figures 1 and 2). Although measles cases were reported from all five health districts in Puerto Rico during the 4-week period, March 24 through April 20, 1968, only two health districts (East and South) reported a total of 10 or more cases. All five health districts reported a total of 10 or more cases in the corresponding 4-week period in 1967.

(Reported by State Services Section, and Statistics Section, Epidemiology Program, NCDC.)

TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES

FOR WEEKS ENDED

MAY 4, 1968 AND MAY 6, 1967 (18th WEEK)

AREA	ASEPTIC MENINGITIS		BRUCELLOSIS	DIPHTHERIA	ENCEPHALITIS			HEPATITIS			MALARIA
					Primary including unsp. cases		Post-Infectious	Serum	Infectious		
	1968	1967	1968	1968	1968	1967	1968	1968	1968	1967	1968
UNITED STATES...	35	32	3	-	12	29	30	79	797	769	36
NEW ENGLAND.....	-	1	1	-	2	3	1	1	42	25	2
Maine..*.....	-	-	-	-	-	-	-	-	4	5	-
New Hampshire.....	-	-	-	-	-	-	-	-	2	-	-
Vermont.....	-	-	-	-	-	-	-	-	-	1	-
Massachusetts.....	-	-	1	-	-	2	1	-	22	7	1
Rhode Island.....	-	1	-	-	1	1	-	1	10	1	-
Connecticut.....	-	-	-	-	-	-	-	-	4	11	1
MIDDLE ATLANTIC.....	3	5	1	-	2	2	-	22	101	184	3
New York City.....	-	-	-	-	1	1	-	11	2	43	-
New York, up-State.	-	2	-	-	1	-	-	-	24	37	-
New Jersey.....	1	2	-	-	-	1	-	6	21	70	2
Pennsylvania.....	2	1	1	-	-	-	-	5	54	34	1
EAST NORTH CENTRAL...	3	3	-	-	5	9	5	4	127	120	5
Ohio.....	1	1	-	-	1	5	1	-	41	19	-
Indiana.....	-	-	-	-	-	1	-	-	15	19	-
Illinois.....	2	1	-	-	-	2	-	2	33	37	4
Michigan.....	-	1	-	-	4	-	4	2	29	39	1
Wisconsin.....	-	-	-	-	-	1	-	-	9	6	-
WEST NORTH CENTRAL...	-	1	1	-	-	-	1	-	36	62	2
Minnesota.....	-	1	-	-	-	-	-	-	4	17	-
Iowa.....	-	-	1	-	-	-	1	-	7	9	-
Missouri.....	-	-	-	-	-	-	-	-	16	26	-
North Dakota.....	-	-	-	-	-	-	-	-	-	4	-
South Dakota	-	-	-	-	-	-	-	-	-	1	-
Nebraska.....	-	-	-	-	-	-	-	-	1	3	-
Kansas.....	-	-	-	-	-	-	-	-	8	2	2
SOUTH ATLANTIC.....	9	4	-	-	2	5	10	4	95	73	15
Delaware.....	-	3	-	-	-	-	-	-	-	7	-
Maryland..*.....	1	-	-	-	-	-	2	3	15	13	-
Dist. of Columbia..	-	-	-	-	-	-	-	-	-	-	-
Virginia.....	-	-	-	-	-	3	-	-	7	8	-
West Virginia.....	2	1	-	-	-	-	-	-	6	9	-
North Carolina..*..	2	-	-	-	-	1	-	1	12	3	4
South Carolina.....	-	-	-	-	-	-	-	-	4	-	-
Georgia.....	-	-	-	-	-	1	-	-	22	17	10
Florida.....	4	-	-	-	2	-	8	-	29	16	1
EAST SOUTH CENTRAL...	1	1	-	-	-	-	3	-	64	43	1
Kentucky.....	-	-	-	-	-	-	-	-	26	12	-
Tennessee.....	-	-	-	-	-	-	3	-	14	16	-
Alabama..*.....	-	1	-	-	-	-	-	-	15	-	1
Mississippi.....	1	-	-	-	-	-	-	-	9	15	-
WEST SOUTH CENTRAL...	10	6	-	-	1	3	1	3	66	79	2
Arkansas.....	2	-	-	-	-	-	-	-	2	2	-
Louisiana.....	5	1	-	-	1	2	1	2	16	7	2
Oklahoma.....	1	1	-	-	-	-	-	-	7	10	-
Texas.....	2	4	-	-	-	1	-	1	41	60	-
MOUNTAIN.....	-	-	-	-	-	1	2	1	21	16	2
Montana.....	-	-	-	-	-	-	-	-	8	2	-
Idaho.....	-	-	-	-	-	-	-	-	-	1	-
Wyoming.....	-	-	-	-	-	-	1	-	-	2	-
Colorado.....	-	-	-	-	-	1	-	-	3	3	2
New Mexico.....	-	-	-	-	-	-	1	-	5	1	-
Arizona.....	-	-	-	-	-	-	-	1	3	5	-
Utah.....	-	-	-	-	-	-	-	-	2	1	-
Nevada.....	-	-	-	-	-	-	-	-	-	1	-
PACIFIC.....	9	11	-	-	-	6	7	44	245	167	4
Washington.....	-	-	-	-	-	-	-	-	26	8	2
Oregon.....	-	-	-	-	-	1	-	-	19	17	-
California.....	8	8	-	-	-	5	7	44	196	140	2
Alaska.....	-	-	-	-	-	-	-	-	-	2	-
Hawaii.....	1	3	-	-	-	-	-	-	4	-	-
Puerto Rico.....	-	-	-	-	-	-	-	-	9	9	-

*Delayed reports: Aseptic meningitis: N.C. delete 1
Diptheria: Ala. 1
Encephalitis, primary: Md. 1 case 1967
Hepatitis, infectious: Me. 1

TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES

FOR WEEKS ENDED

MAY 4, 1968 AND MAY 6, 1967 (18th WEEK) - CONTINUED

AREA	MEASLES (Rubeola)			MENINGOCOCCAL INFECTIONS, TOTAL			MUMPS	POLIOMYELITIS			RUBELLA
		Cumulative			Cumulative			Total	Paralytic		
	1968	1968	1967	1968	1968	1967	1968	1968	1968	Cum. 1968	1968
UNITED STATES...	685	12,162	42,160	61	1,308	1,063	4,895	1	1	15	2,506
NEW ENGLAND.....	81	540	507	5	69	47	442	-	-	-	444
Maine..*.....	-	14	140	1	5	2	9	-	-	-	48
New Hampshire.*...	11	68	69	1	7	2	2	-	-	-	3
Vermont.....	-	1	22	-	1	-	36	-	-	-	-
Massachusetts*....	11	194	187	1	29	23	276	-	-	-	185
Rhode Island.....	-	1	31	1	6	2	39	-	-	-	92
Connecticut.....	59	262	58	1	21	18	80	-	-	-	116
MIDDLE ATLANTIC.....	108	1,866	1,399	10	218	164	204	-	-	-	306
New York City.....	68	596	244	1	40	26	136	-	-	-	171
New York, Up-State.	29	816	319	1	37	41	NN	-	-	-	37
New Jersey.*.....	-	315	336	5	76	66	68	-	-	-	68
Pennsylvania.....	11	139	500	3	65	31	NN	-	-	-	30
EAST NORTH CENTRAL...	128	2,609	3,372	6	137	117	1,579	-	-	-	655
Ohio.....	22	221	571	2	37	44	89	-	-	-	153
Indiana*.....	23	419	414	-	18	14	216	-	-	-	87
Illinois.....	30	1,052	558	3	33	25	159	-	-	-	175
Michigan.....	6	163	672	1	37	25	508	-	-	-	43
Wisconsin.....	47	754	1,157	-	12	9	607	-	-	-	197
WEST NORTH CENTRAL...	10	261	1,860	2	57	46	489	-	-	-	91
Minnesota.....	1	8	92	1	16	9	27	-	-	-	1
Iowa.....	1	51	460	-	4	9	305	-	-	-	81
Missouri.....	1	65	135	-	11	11	16	-	-	-	-
North Dakota.....	6	97	669	-	2	-	73	-	-	-	8
South Dakota.....	-	4	46	-	4	6	NN	-	-	-	-
Nebraska.....	1	28	458	1	6	9	24	-	-	-	1
Kansas.....	-	8	NN	-	14	2	44	-	-	-	-
SOUTH ATLANTIC.....	26	1,005	4,777	20	293	204	173	-	-	-	305
Delaware.....	1	8	32	-	3	5	6	-	-	-	9
Maryland.....	2	59	85	1	18	26	35	-	-	-	29
Dist. of Columbia..	-	6	12	-	10	6	-	-	-	-	-
Virginia.....	5	194	1,494	2	21	17	10	-	-	-	17
West Virginia.....	10	168	907	1	7	16	48	-	-	-	43
North Carolina.....	-	254	760	-	58	43	NN	-	-	-	-
South Carolina.....	-	18	352	3	51	19	8	-	-	-	62
Georgia.....	-	3	23	9	57	33	-	-	-	-	-
Florida.....	8	295	1,112	4	68	39	66	-	-	-	145
EAST SOUTH CENTRAL...	13	356	4,130	4	106	99	333	-	-	-	163
Kentucky.....	3	103	1,073	1	41	29	157	-	-	-	19
Tennessee.....	2	48	1,401	1	33	41	156	-	-	-	76
Alabama.....	-	76	1,050	2	16	18	20	-	-	-	68
Mississippi.....	8	129	606	-	16	11	-	-	-	-	-
WEST SOUTH CENTRAL...	190	3,225	14,404	5	242	161	417	1	1	7	135
Arkansas.....	1	1	1,351	1	15	19	1	-	-	-	-
Louisiana.....	-	2	104	2	63	59	-	-	-	-	3
Oklahoma.....	-	100	3,272	-	44	10	7	-	-	-	-
Texas.....	189	3,122	9,677	2	120	73	409	1	1	7	132
MOUNTAIN.....	26	573	3,171	3	19	21	241	-	-	-	78
Montana.....	-	63	233	-	2	-	14	-	-	-	1
Idaho.....	-	11	319	3	6	1	12	-	-	-	1
Wyoming.....	2	44	21	-	-	-	10	-	-	-	-
Colorado..*.....	14	255	879	-	7	10	103	-	-	-	42
New Mexico.....	2	52	478	-	-	3	19	-	-	-	2
Arizona.....	6	125	723	-	1	2	45	-	-	-	27
Utah.....	2	18	261	-	-	3	34	-	-	-	5
Nevada.....	-	5	257	-	3	2	4	-	-	-	-
PACIFIC.....	103	1,727	8,540	6	167	204	1,017	-	-	8	329
Washington.....	20	431	4,081	1	27	20	279	-	-	-	56
Oregon.....	22	352	1,138	1	15	17	42	-	-	-	16
California.....	61	911	3,139	4	115	158	663	-	-	8	246
Alaska.....	-	-	97	-	-	8	10	-	-	-	2
Hawaii.....	-	33	85	-	10	1	23	-	-	-	9
Puerto Rico.....	19	255	1,445	-	15	8	17	-	-	-	4

*Delayed reports: Measles: N.H. 1, Mass. delete 52, N.J. delete 6, Colo. 8
Mumps: N.H. 5
Rubella: Me. 5, Ind. 41

TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES
FOR WEEKS ENDED
MAY 4, 1968 AND MAY 6, 1967 (18th WEEK) · CONTINUED

AREA	STREPTOCOCCAL SORE THROAT & SCARLET FEVER	TETANUS		TULAREMIA		TYPHOID		TYPHUS FEVER TICK-BORNE (Rky. Mt. Spotted)		RABIES IN ANIMALS	
	1968	1968	Cum. 1968	1968	Cum. 1968	1968	Cum. 1968	1968	Cum. 1968	1968	Cum. 1968
UNITED STATES...	8,390	1	36	3	25	7	85	3	11	93	1,363
NEW ENGLAND.....	1,049	-	1	-	-	-	2	-	-	2	53
Maine.*.....	48	-	-	-	-	-	-	-	-	-	48
New Hampshire.....	45	-	-	-	-	-	-	-	-	-	2
Vermont.....	116	-	-	-	-	-	-	-	-	1	2
Massachusetts.....	178	-	-	-	-	-	1	-	-	1	1
Rhode Island.....	145	-	-	-	-	-	-	-	-	-	-
Connecticut.....	517	-	1	-	-	-	1	-	-	-	-
MIDDLE ATLANTIC.....	377	-	6	-	-	-	10	-	-	-	11
New York City.....	32	-	3	-	-	-	6	-	-	-	-
New York, Up-State.	305	-	3	-	-	-	1	-	-	-	7
New Jersey.....	NN	-	-	-	-	-	-	-	-	-	-
Pennsylvania.....	40	-	-	-	-	-	3	-	-	-	4
EAST NORTH CENTRAL...	832	-	3	-	4	3	13	-	-	19	104
Ohio.....	93	-	-	-	1	3	10	-	-	2	46
Indiana.....	242	-	-	-	-	-	1	-	-	12	31
Illinois.....	129	-	2	-	2	-	1	-	-	3	11
Michigan.....	234	-	1	-	1	-	-	-	-	-	6
Wisconsin.....	134	-	-	-	-	-	1	-	-	2	10
WEST NORTH CENTRAL...	469	-	2	-	5	-	4	1	1	18	311
Minnesota.....	29	-	-	-	-	-	-	-	-	7	85
Iowa.....	124	-	-	-	-	-	-	-	-	4	53
Missouri.....	-	-	2	-	3	-	3	-	-	4	56
North Dakota.....	81	-	-	-	-	-	-	-	-	-	53
South Dakota.....	20	-	-	-	1	-	1	1	1	-	34
Nebraska.....	1	-	-	-	-	-	-	-	-	3	16
Kansas.....	214	-	-	-	1	-	-	-	-	-	14
SOUTH ATLANTIC.....	692	1	8	1	5	1	21	2	9	10	156
Delaware.....	15	-	-	-	-	-	-	-	-	-	-
Maryland.....	107	-	-	-	-	-	4	-	-	1	3
Dist. of Columbia..	-	-	1	-	-	-	1	-	-	-	-
Virginia.....	130	-	2	-	1	-	3	2	7	-	71
West Virginia.....	190	-	-	-	-	-	-	-	-	-	20
North Carolina.....	9	-	2	-	2	-	2	-	2	-	4
South Carolina.....	17	1	1	-	-	-	-	-	-	-	-
Georgia.....	45	-	-	-	1	-	7	-	-	1	14
Florida.....	179	-	2	1	1	1	4	-	-	8	44
EAST SOUTH CENTRAL...	1,384	-	4	-	4	-	11	-	1	10	366
Kentucky.....	322	-	1	-	1	-	1	-	-	7	171
Tennessee.....	927	-	-	-	3	-	7	-	-	3	180
Alabama..*.....	103	-	1	-	-	-	-	-	-	-	15
Mississippi.....	32	-	2	-	-	-	3	-	1	-	-
WEST SOUTH CENTRAL...	571	-	5	2	5	-	8	-	-	18	250
Arkansas.....	14	-	-	-	1	-	1	-	-	1	28
Louisiana.....	3	-	4	-	-	-	1	-	-	3	28
Oklahoma.....	23	-	-	-	1	-	1	-	-	6	80
Texas.....	531	-	1	2	3	-	5	-	-	8	114
MOUNTAIN.....	1,841	-	-	-	2	1	7	-	-	4	25
Montana.....	28	-	-	-	-	-	-	-	-	-	-
Idaho.....	102	-	-	-	-	-	-	-	-	-	-
Wyoming.*.....	120	-	-	-	-	-	1	-	-	-	1
Colorado.....	1,221	-	-	-	1	-	2	-	-	-	1
New Mexico.....	165	-	-	-	-	1	4	-	-	2	13
Arizona.....	56	-	-	-	-	-	-	-	-	2	10
Utah.....	149	-	-	-	1	-	-	-	-	-	-
Nevada.....	-	-	-	-	-	-	-	-	-	-	-
PACIFIC.....	1,175	-	7	-	-	2	9	-	-	12	87
Washington.....	182	-	-	-	-	-	-	-	-	-	-
Oregon.....	184	-	-	-	-	1	2	-	-	1	1
California.....	723	-	7	-	-	1	7	-	-	11	86
Alaska.....	32	-	-	-	-	-	-	-	-	-	-
Hawaii.....	54	-	-	-	-	-	-	-	-	-	-
Puerto Rico.....	11	-	1	-	-	-	-	-	-	-	12

*Delayed reports: SST: Me. 20, Ala. 1, Wyo. 106

Week No. 18

TABLE IV. DEATHS IN 122 UNITED STATES CITIES FOR WEEK ENDED MAY 4, 1968

(By place of occurrence and week of filing certificate. Excludes fetal deaths)

Area	All Causes		Pneumonia and Influenza	Under 1 year
	All Ages	65 years and over	All Ages	All Causes
NEW ENGLAND:	704	430	33	33
Boston, Mass.	228	136	15	12
Bridgeport, Conn.	44	26	3	2
Cambridge, Mass.	24	23	-	-
Fall River, Mass.	24	17	-	2
Hartford, Conn.	59	30	2	8
Lowell, Mass.	31	16	1	1
Lynn, Mass.	15	9	-	-
New Bedford, Mass.	30	14	2	-
New Haven, Conn.	46	28	-	-
Providence, R. I.	58	37	1	1
Somerville, Mass.	17	9	1	-
Springfield, Mass.	51	33	5	3
Waterbury, Conn.	25	16	-	1
Worcester, Mass.	52	36	3	3
MIDDLE ATLANTIC:	3,385	1,976	109	139
Albany, N. Y.	49	23	-	4
Allentown, Pa.	37	20	1	1
Buffalo, N. Y.	163	94	4	6
Camden, N. J.	34	21	2	1
Elizabeth, N. J.	26	12	3	3
Erie, Pa.	45	30	6	-
Jersey City, N. J.	60	34	2	4
Newark, N. J.	78	40	3	7
New York City, N. Y.	1,670	993	53	59
Paterson, N. J.	37	25	3	2
Philadelphia, Pa.	597	334	16	26
Pittsburgh, Pa.	206	108	4	13
Reading, Pa.	48	35	3	-
Rochester, N. Y.	118	73	3	10
Schenectady, N. Y.	14	9	-	1
Scranton, Pa.	38	26	-	1
Syracuse, N. Y.	69	37	2	1
Trenton, N. J.	48	26	1	-
Utica, N. Y.	20	15	3	-
Yonkers, N. Y.	28	21	-	-
EAST NORTH CENTRAL:	2,654	1,476	84	178
Akron, Ohio	62	35	-	4
Canton, Ohio	35	14	5	4
Chicago, Ill.	769	410	34	50
Cincinnati, Ohio	180	105	3	10
Cleveland, Ohio	229	106	4	27
Columbus, Ohio	108	53	1	10
Dayton, Ohio	71	36	4	6
Detroit, Mich.	346	195	6	23
Evansville, Ind.	43	25	3	1
Flint, Mich.	64	35	1	4
Fort Wayne, Ind.	42	30	2	2
Gary, Ind.	33	15	1	4
Grand Rapids, Mich.	49	36	3	2
Indianapolis, Ind.	153	83	3	10
Madison, Wis.	28	15	1	2
Milwaukee, Wis.	160	103	6	7
Peoria, Ill.	28	17	-	3
Rockford, Ill.	26	21	2	-
South Bend, Ind.	47	31	2	4
Toledo, Ohio	106	69	2	3
Youngstown, Ohio	75	42	1	2
WEST NORTH CENTRAL:	769	476	24	38
Des Moines, Iowa	57	32	-	4
Duluth, Minn.	16	10	1	-
Kansas City, Kans.	48	30	1	2
Kansas City, Mo.	134	88	5	5
Lincoln, Nebr.	17	11	1	1
Minneapolis, Minn.	82	56	3	5
Omaha, Nebr.	68	38	1	7
St. Louis, Mo.	229	133	6	10
St. Paul, Minn.	66	49	5	2
Wichita, Kans.	52	29	1	2
SOUTH ATLANTIC:	1,126	597	44	71
Atlanta, Ga.	117	50	6	8
Baltimore, Md.	229	115	6	14
Charlotte, N. C.	35	21	1	3
Jacksonville, Fla.	68	36	2	3
Miami, Fla.	107	62	2	5
Norfolk, Va.	53	27	4	6
Richmond, Va.	84	50	1	2
Savannah, Ga.	42	22	2	-
St. Petersburg, Fla.	77	65	2	-
Tampa, Fla.	69	40	4	4
Washington, D. C.	183	78	6	24
Wilmington, Del.	62	31	8	2
EAST SOUTH CENTRAL:	657	362	33	19
Birmingham, Ala.	88	45	-	4
Chattanooga, Tenn.	57	28	3	1
Knoxville, Tenn.	42	25	1	3
Louisville, Ky.	116	70	18	2
Memphis, Tenn.	159	97	2	2
Mobile, Ala.	37	19	1	2
Montgomery, Ala.	58	29	1	2
Nashville, Tenn.	100	49	7	3
WEST SOUTH CENTRAL:	1,143	600	45	65
Austin, Tex.	39	21	7	-
Baton Rouge, La.	62	30	4	7
Corpus Christi, Tex.	25	16	-	2
Dallas, Tex.	158	81	4	6
El Paso, Tex.	32	18	2	-
Fort Worth, Tex.	64	29	3	8
Houston, Tex.	236	107	4	11
Little Rock, Ark.	59	21	6	12
New Orleans, La.	139	78	4	5
Oklahoma City, Okla.	65	41	1	2
San Antonio, Tex.	146	80	4	7
Shreveport, La.	46	30	4	3
Tulsa, Okla.	72	48	2	2
MOUNTAIN:	425	266	23	11
Albuquerque, N. Mex.	43	21	4	1
Colorado Springs, Colo.	28	17	2	1
Denver, Colo.	103	71	3	1
Ogden, Utah	17	12	3	1
Phoenix, Ariz.	88	51	3	1
Pueblo, Colo.	26	16	3	4
Salt Lake City, Utah	52	32	2	-
Tucson, Ariz.	68	46	3	2
PACIFIC:	1,689	1,024	32	59
Berkeley, Calif.	23	19	-	-
Fresno, Calif.	63	31	1	4
Glendale, Calif.	33	21	-	1
Honolulu, Hawaii	43	18	-	2
Long Beach, Calif.	89	56	1	3
Los Angeles, Calif.	540	333	11	12
Oakland, Calif.	87	51	1	5
Pasadena, Calif.	42	31	1	-
Portland, Oreg.	120	72	2	5
Sacramento, Calif.	64	33	1	4
San Diego, Calif.	104	58	3	3
San Francisco, Calif.	185	109	2	8
San Jose, Calif.	37	27	-	1
Seattle, Wash.	160	95	9	8
Spokane, Wash.	58	41	-	2
Tacoma, Wash.	41	29	-	1
Total	12,552	7,207	427	613

Cumulative Totals
including reported corrections for previous weeks

All Causes, All Ages	241,939
All Causes, Age 65 and over	142,534
Pneumonia and Influenza, All Ages	11,619
All Causes, Under 1 Year of Age	10,738

INTERNATIONAL NOTES
QUARANTINE MEASURES

Additional Immunization Information for International Travel – 1967-68 edition, Public Health Service Publication No. 384

The following information should be included in Section 5:

AFRICA

Central African Republic – Page 27

Delete all previous information concerning yellow fever. Insert: Yellow fever vaccination is required of all arrivals, 1 year of age and over.*

*Conformity of this measure with the Regulations may be open to question and the World Health Organization is in communication with the health administration concerned.

ERRATA

Vol. 17, No. 15, p. 136.

In the article "Tetanus – 1965 and 1966 Part I," in Figure 5, the block representing Puerto Rico should be omitted. The data in this 3-part series on tetanus include only the cases that were reported in the United States; it does not include the cases that were reported in Puerto Rico.

Vol. 17, No. 16, p. 140.

In the article "Bovine Cysticercosis – Texas," the third sentence in the first paragraph is incomplete. It should read: "Infected cattle are known to have been shipped to plants in Oklahoma, Nebraska, Colorado, Missouri, Kansas, Iowa, Texas, and Florida."

Vol. 17, No. 17

p. 149

In the "Contents," the article "Coccidioidomycosis – New York . . . 152" should be changed to "Coccidioidomycosis – New York . . . 153" and the article "Measles – United States . . . 154" should be changed to "Measles – United States . . . 153."

p. 152

In the article "Tetanus – 1965 and 1966 Part II," in the second sentence in the first paragraph, "Figure 1" should be changed to "Figure 2."

Also in this article in the third paragraph, the sixth sentence is incomplete. It should read: "The national incidence rate was 1.34 cases per 100,000 live births, but the incidence was 0.53 cases per 100,000 white births versus 5.47 cases per 100,000 non-white births, a tenfold difference."

p. 153

In the article "Measles – United States," in the second sentence in the first paragraph, "(Figure 1 and Table 1)" should be changed to "(Figure 3 and Table 1)."

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NOTE: THE DATA IN THIS REPORT ARE PROVISIONAL AND ARE BASED ON WEEKLY TELEGRAMS TO THE NCDC BY THE INDIVIDUAL STATE HEALTH DEPARTMENTS. THE REPORTING WEEK CONCLUDES ON SATURDAY; COMPILED DATA ON A NATIONAL BASIS ARE RELEASED ON THE SUCCEEDING FRIDAY

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